Charter for the SEEDS Standards Process Working Group

The charter of the SEEDS Standards Process Working Group is to advance the productive use of data systems standards within the ESE. Through management of the SEEDS Standards Process, the working group shall direct the adoption or development of data systems standards relevant to the interoperation of ESE data systems and to the interoperation of ESE data systems with ESE's partners, suppliers, and customers consistent with Enterprise goals.

Background:

Future ESE data systems will consist of a heterogeneous mix of interdependent components derived from the contributions of numerous individuals and institutions. These widely varying participants will be responsible for data management functions including data acquisition and synthesis; access to data and services; and data stewardship.

> "An important premise underlying the operation [of the ESE network of data systems and services] is that its various parts should have considerable freedom in the ways in which they implement their functions and capabilities. Implementation will not be centrally developed, nor will the pieces developed be centrally managed. However, every part [of the ESE network] should be configured in such a way that data and information can be readily transferred to any other. This will be achieved primarily through the adoption of common standards and practices [SEEDS Pre-formulation Document]."

The scope of standards to be considered by the SEEDS Standards Process Working group includes standards for *Data System Interchange Formats, Data Distribution Formats, Data Description (Metadata & Documentation), Service Interfaces* and others as directly applied to ESE data systems. Definitions of italicized terms can be found in the SEEDS recommendations document.

Objectives:

1. Develop and manage standards adoption, development, and approval processes to guide the evolution of ESE standards.
2. Leverage community expertise, ideas, and capabilities by engaging communities in the standards processes.
3. Increase the use of ESE standards across ESE data systems, data providers, and data users and encourage use of standards between ESE and external agencies and organizations.
4. Support the evolving strategies and goals of the Earth Science Enterprise.

Responsibilities:

1. Manage and coordinate activities in the adoption, development, and approval of ESE standards.
2. Identify where *core* or *community* ESE standards are warranted.
3. Coordinate public reviews and evaluations of various candidate standards and their implementations.
4. Form and task Technical Working Groups to evaluate candidate standards.
5. Monitor Technical Working Groups' activities.
6. Make decisions related to the disposition of candidate standards in the approval process.
7. Advise the SEEDS Office of resources needed to develop or adopt standards or to provide technical support for approved standards.
8. Coordinate document management for all candidate standards, ESE *core* standards, *community* standards and *technical notes* that come before the Standards Process Working Group.
9. Publicize ESE standards in SEEDS communities, industry, and external organizations.
10. Participate in national and international data systems standards organizations.
11. Coordinate related activities to facilitate the use of standards across ESE data systems, data providers, and data users.

Membership

1. The Standards Process Working Group shall be composed of full time staff and part time permanent members from the SEEDS Office, ESE mission projects, ESE data systems awardees (e.g. REASoN CAN), ESE science data providers, etc. The SEEDS Office funds membership and participation in the Standards Process Working Group.
2. Technical Working Groups are commissioned by the Standards Process Working Group to perform specific review and evaluation of candidate standards, related implementations and operational experience. Membership on a Technical Working Group is partially drawn from the Standards Process Working Group membership and partly drawn from technical area experts and/or SEEDS community members. The duration of a Technical Working Group corresponds to the review schedule set by the Standards Process Working Group for a particular candidate standard.

Other potential objectives of ESE standards (didn't make this draft but maybe they should have):

1. Maximize availability and utility of ESE products:
2. Leverage community expertise, ideas, and capabilities:
3. Assure continued effectiveness of evolving ESE funded systems and services.
4. Increase the use of ESE data products in Earth science research and applications.
5. Facilitate interoperability between components of the ESE network of data systems.
6. Enable data and service providers to easily join the ESE network of data systems.
7. Reduce costs within the ESE network of data systems.
8. Meet SEEDS data life cycle and levels of service objectives.
9. Facilitate broader understanding of applicability of existing community (discipline based) standards.
10. Enable measurement based (cross instrument) climate data records.
11. Facilitate inter-disciplinary interoperability of data.
12. Focus on data systems standards and away from science standards – don't cross the line where data interoperability becomes science interoperability. Examples are calibration, algorithmic, gridding, binning, pressure levels, more.